		h m	Long.	System.
Great Red Spot	May 26	16 18	29·5	II.
„ „	May 31	15 28	30·4	„
„ „	June 5	14 33	28·3	„
P. end dark mass, S. tropical zone	June 6	15 16	204·5	„
Very bright equa. spots	June 3	15 19	268·1	I.
	June 6	14 49	3·4	„
Very dark equa. spot	June 3	15 0	256·5	„
Dark N. tropical spots	June 3	14 45	95·1	II.
	June 3	15 28	121·0	„
	June 3	16 1	141·0	„
Dark N. temp. spot	May 26	15 38	5·3	„
	May 31	14 50	7·4	„
Dark N.N. temp. spot	June 6	15 12	202·1	„

The accelerated motion of the Great Red Spot has been continued for this object, has lost about 8° in longitude since 1902 December (when it was 37°), and this corresponds to a rotation period of $9^h\ 55^m\ 38^s{\cdot}8$. The large dark spot in the S. tropical zone, frequently observed in 1901 and 1902, is still prominently visible, and its p. side will be in longitude 185° at the middle of 1903 July.

In the various observations here described a 10-inch reflector was employed with a power of 312, but occasionally on *Mars* magnifiers up to 488 were found serviceable.

Bishopston, Bristol: 1903 *June* 7.

Postscript.—From my subsequent observations of the Great Red Spot on *Jupiter*, including one obtained on July 13, $16^h\ 2^m$, when the object was in longitude 32°·8, it appears certain either that the motion has been recently retarded or that my transits at the end of May and beginning of June were a little too early.

July 14.

Observations of the Satellite of Neptune from Photographs taken at the Royal Observatory, Greenwich, between 1902 *November* 12 *and* 1903 *April* 27.

(*Communicated by the Astronomer Royal.*)

The following measures of position-angle and distance of *Neptune's* satellite were made from photographs taken with the 26-inch refractor of the Thompson Equatorial. The occulting shutter was used when not otherwise noted, and the position of

the plate adjusted so that the planet was behind the shutter while the satellite was just outside it. In one or two cases the planet was not put sufficiently far behind the shutter so that the image falls very near its edge and is not clearly separated from the outer halo. These are noted as "partly occulted."

By an arrangement of Mr. Davidson's the occulting shutter has been made to work automatically, so as to give an exposure of about $\frac{1}{10}^{s}$ every 20^{s} to the planet, the satellite being meanwhile exposed for from 20^{m} to 30^{m}.

The zero of position-angle was obtained by stopping the clock and giving a short supplementary exposure. Generally, several short exposures were given, the clock being stopped for a short time between each of them.

Owing to wind on some nights and bad definition on others, this series of photographs is not quite so good as that taken between 1902 January 6 and 1902 April 10.

The photographs were taken by Messrs. Davidson, Edney, or Melotte, and the measurement of the photographs was made by Mr. Edney and Mr. Burkett, in the manner described in *Monthly Notices*, vol. lxii. p. 623. A mean correction for refraction has been applied.

The tabular positions were computed from the data given in the *Connaissance des Temps* based on Dr. H. Struve's elements, the eccentricity of the orbit being neglected owing to the uncertainty as to the present position of the periastron.

Neptune and Satellite.

Position-angle and Distance, from Photographs taken with the 26-inch Refractor.

Date and G.M.T.				Position Angle.			Distance.			Remarks.
				Observed.	Tabular.	T-O.	Observed.	Tabular.	T-O.	
1902.	d.	h.	m. s.	°	°	°	″	″	″	
Nov.	12	11	44 44	60·40	59·51	−0·89	15·04	14·85	−·19	Not occulted.
	12	12	21 2	58·56	58·21	−0·35	14·19	14·71	+·52	Not occulted.
	12	13	34 26	55·57	55·53	−0·04	14·45	14·41	−·04	Not occulted.
	12	14	8 35	55·34	54·24	−1·10	14·14	14·26	+·12	Not occulted.
	13	11	37 32	345·61	342·98	−2 63	10·89	11·03	+·14	
	13	12	3 44	340·65	341·31	+0·66	10·85	11·08	+·23	
	17	11	34 29	95·16	96·87	+1·71	16·71	16·40	−·31	
	20	11	32 53	274·09	274·35	+0·26	—	—		Planet partly occulted.
	20	12	14 44	272·24	273·16	+0·92	—	—		Planet partly occulted.
	28	12	2 51	135·78	136·10	+0·32	12·70	12·48	−·22	
	28	12	35 27	135·21	134·48	−0·73	12·70	12·62	−·08	Satellite faint.
Dec.	29	7	41 34	68·66	67·83	−0·83	15·78	16·03	+·25	Satellite very faint.
	29	8	17 4	66 84	66·73	−0·11	15·60	15·92	+·32	Satellite faint.

Date and G.M.T.				Position Angle. Observed.	Tabular.	T–O.	Distance. Observed.	Tabular.	T–O.	Remarks.
1902. d.	h.	m.	s.	°	°	°	″	″	″	
31	10	17	26	281·42	281·98	+0·56	15·73	15·94	+·21	
31	10	53	20	280·98	280·88	−0·10	15·88	16 05	+·17	
1903. Jan. 1	12	49	30	234·64	234·52	−0·12	14·57	14·59	+·02	
3	9	14	8	98·43	101·18	+2·75	15·68	16·01	+·33	Very faint.
3	9	47	52	98·28	100·15	+1·87	16·04	16·10	+·06	
15	9	40	9	89·37	91·54	+2·17	17·21	16 75	−·46	
15	10	13	32	89·09	89·05	−0·04	16·64	16·79	+·15	
15	10	55	44	87·16	87·88	+0·72	16·52	16·82	+·30	
23	9	3	23	311·49	313·17	+1·68	12·67	12·52	−·15	
23	9	32	6	309·83	311·76	+1·93	12·59	12·64	+·05	
23	10	4	28	307·03	310·19	+3·16	12·67	12·78	+·11	Planet partly occulted.
25	9	1	42	215·28	214·01	−1·27	12·69	12·50	−·19	Satellite faint.
28	7	40	55	33·63	33·64	+0·01	12·20	12·47	+·27	
28	8	13	12	29·36	32·01	+2·65	11·84	12·33	+·49	
Feb. 1	9	40	25	116·37	119·57	+3·20	13·90	13·77	−·13	Satellite very faint.
2	8	5	51	77·00	77·77	+0·77	16 67	16·68	+·01	
6	9	4	8	191·21	194·33	+3·12	11·36	11·25	−·11	Satellite very faint.
10	8	45	32	290·70	291·47	+0·77	15·26	14·59	−·67	Satellite very faint.
10	9	22	25	289·89	290·15	+0·26	15·23	14·74	−·49	
16	11	29	9	278·93	280·16	+1·23	15·57	15·76	+·19	
16	11	54	33	279 26	279·38	+0·12	15·56	15·83	+·27	
17	7	32	13	246·67	245·83	−0·84	15·48	15·73	+·25	Satellite very faint.
17	8	2	41	244·06	244 89	+0 83	15·61	15·64	+·03	Satellite very faint.
17	8	53	7	243·87	243·30	−0·57	15·17	15·48	+·31	
18	9	45	50	167 75	169·00	+1·25	10·95	10·76	−·19	
18	10	13	4	166·28	167·21	+0·93	10·71	10·72	+·01	
18	10	39	23	165·23	165·49	+0·26	10·64	10·79	+·15	Satellite ill-defined.
23	7	26	6	239·34	240·37	+1·03	15·15	15·13	−·02	Satellite very faint.
26	8	11	58	54·97	55·80	+0·83	14·43	14·59	+·16	
28	8	45	50	273·88	274·44	+0·56	16·17	16·14	−·03	
28	9	11	41	272·80	273·69	+0·89	15·86	16·19	+·33	
28	9	38	16	271·28	272·93	+1·65	15·65	16·24	+·59	
Mar. 3	7	20	8	92·28	94·38	+2·10	16·31	16·11	−·20	Satellite very faint.
3	7	59	50	93·97	93·22	−0·75	15·77	16·19	+·42	
3	9	56	42	91·53	89·91	−1·62	16·31	16·38	+·07	Satellite very faint.
6	8	50	4	269·23	269·30	+0·07	16·01	16·38	+·37	
6	9	15	38	267·32	268·59	+1·27	16·14	16·42	+·28	
6	9	43	32	266·89	267·82	+0·93	16·53	16·44	−·09	

Date and G.M.T.				Position Angle. Observed.	Tabular.	T–O.	Distance. Observed.	Tabular.	T–O.	Remarks.
1903. d.	h.	m.	s.	°	°	°	″	″	″	
11	8	33	45	315·87	316·18	+0·31	11·67	11·94	+·27	
11	9	7	2	314·72	314·46	−0·26	11·79	12·07	+·28	
13	8	24	15	216 73	217·26	+0·53	12·35	12·56	+·21	Satellite faint.
15	8	32	36	81·94	82·48	+0 54	16·33	16·44	+·11	
15	9	14	32	80·24	81·33	+1·09	16·19	16·44	+·25	
16	10	19	44	26·92	26·98	+0·06	11·90	11·72	−·18	
16	10	46	43	25·58	25·51	−0·07	11·73	11·62	−·11	
21	8	38	54	77·70	77·45	−0·25	15·84	16·28	+·44	
21	9	7	50	77·16	76 65	−0·51	15·57	16·25	+·68	Satellite faint.
26	9	19	19	112·97	114·45	+1·48	13 72	13·88	+·16	
Apr. 14	7	59	40	55·34	57·23	+1·89	14·38	14·34	−·04	Planet partly occulted.
16	8	17	11	274·31	276·19	+1·88	15·63	15·61	−·02	
17	8	22	2	233·39	233·24	−0·15	14·03	13 88	−·15	
24	8	39	47	141·01	141·93	+0·92	11·33	11·32	−·01	
27	8	39	49	316·08	317·16	+1·08	11·80	11·63	−·17	

The Great Nebula in Auriga. By Dr. Max Wolf.

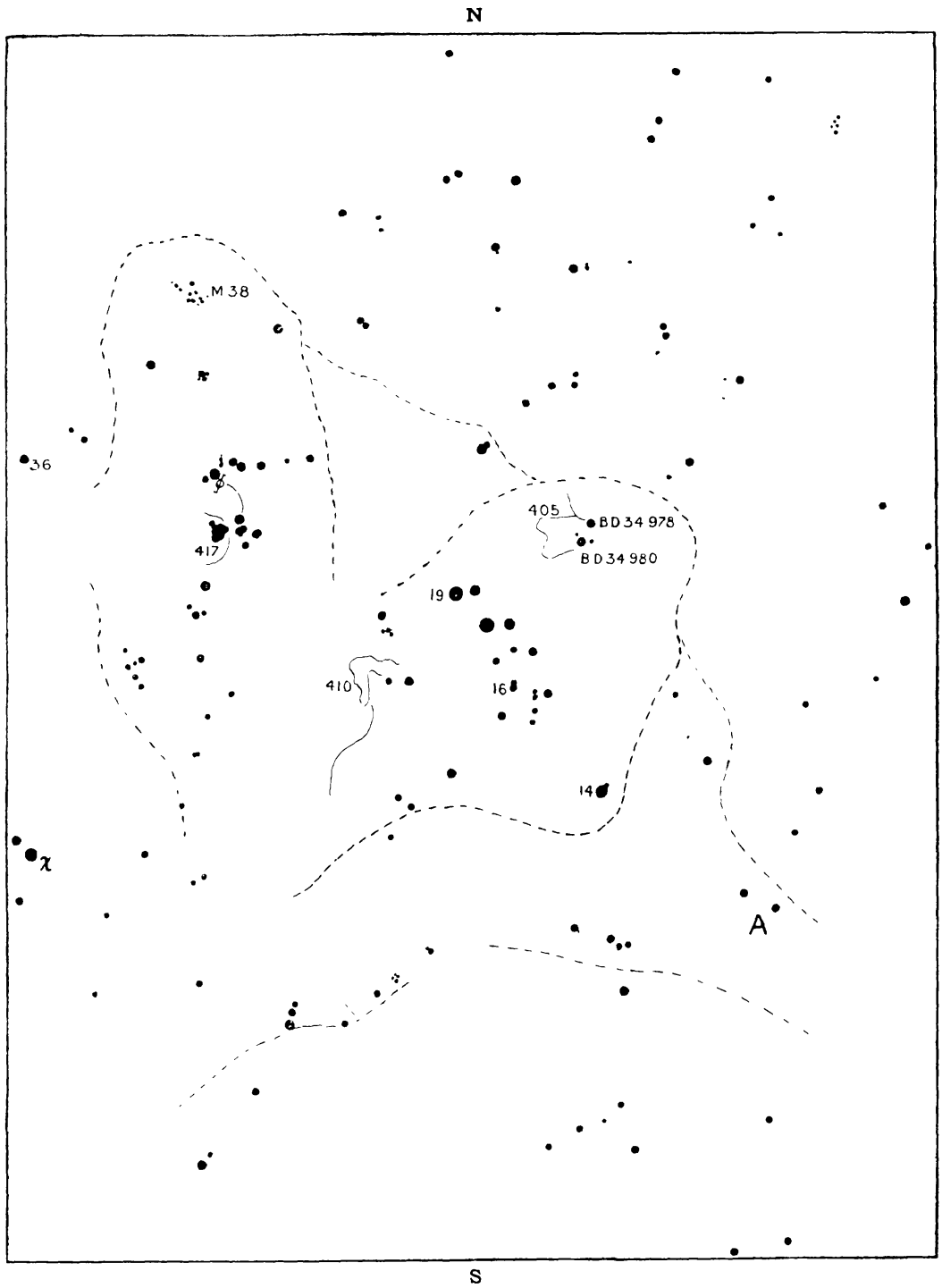
In *Astr. Nachr.* 3130 (1892 October 9) I gave a description of some recently discovered nebulæ in *Auriga*. The most remarkable of these was discovered independently by Schaeberle, E. von Gothard, and myself near the 6·7 mag. star B.D. + 34°, 980. This nebula has received the number 405 in Dreyer's Index Catalogue. Two other nebulæ then discovered were given by Dreyer the numbers 410 and 417; to the east of 417 lies the nebula G.C. 1137.

When photographing the region of Nova *Aurigæ* with the two 16-inch Brashear lenses on the evening of 1902 March 6 with five hours' exposure I found a large diffused nebulosity at the edge of the plates near the places of the above-named nebulæ. In the present year, on 1903 February 19, I took a further photograph with the region in the centre of the field of my two 16-inch lenses.

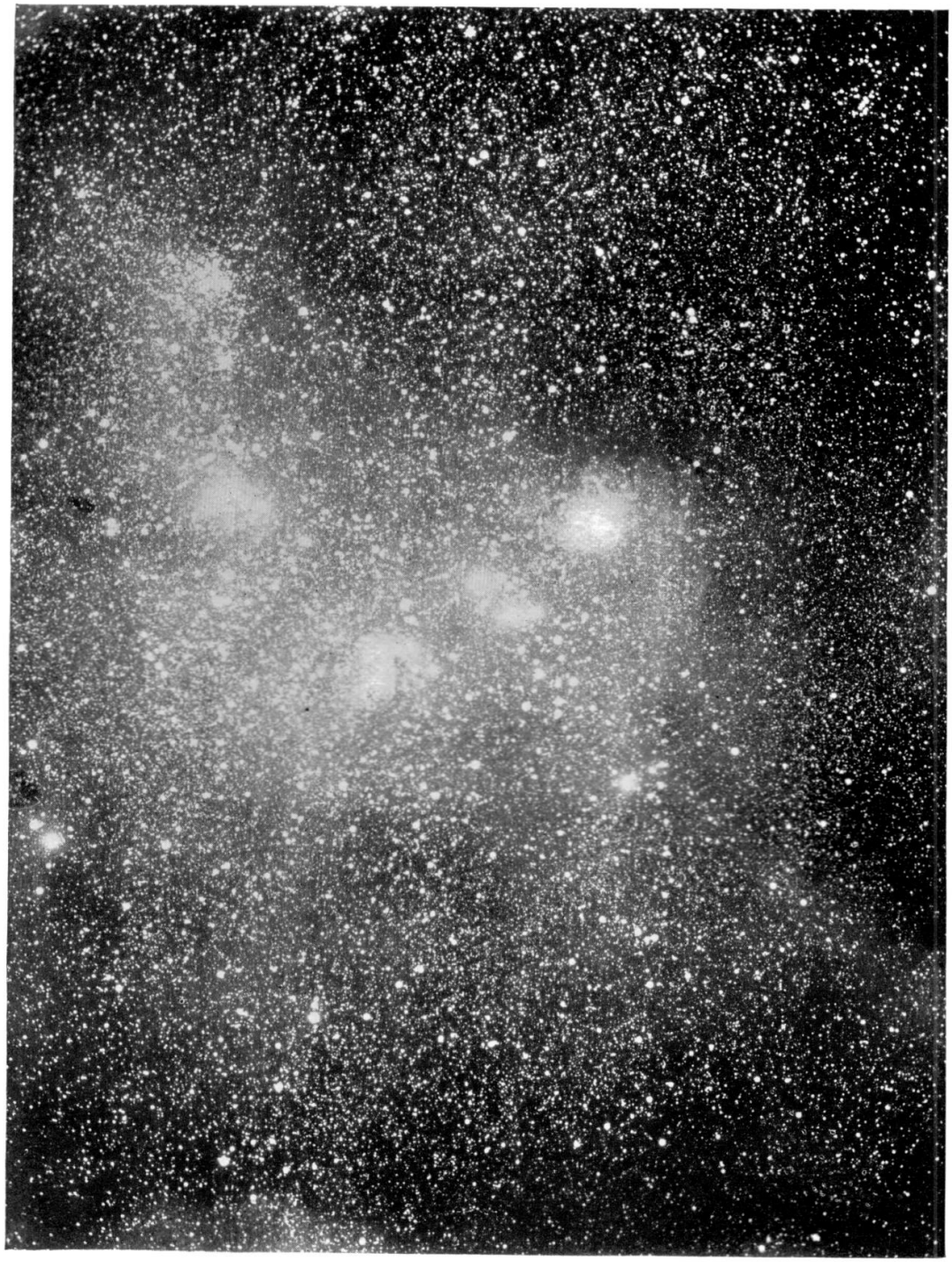
The plates were exposed from $7^h\ 9^m$ to $12^h\ 14^m$ Koenigstuhl M.T. They show such interesting nebulosities that I send the accompanying pictures to the Society.

The reproduction (plate 20) is an untouched contact print from one of the original plates. A great part of the plate is covered with nebulosity, condensed around five bright groups,

KEY MAP.



NEBULOSITIES IN AURIGA.



NEBULOSITIES IN AURIGA.

PHOTOGRAPH BY DR. MAX WOLF, HEIDELBERG.